



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/144,635

08/31/1998

DALE L. BARTHOLOMEW

00-VE14.10

5034

32127

7590

04/18/2008

VERIZON

PATENT MANAGEMENT GROUP

1515 N. COURTHOUSE ROAD, SUITE 500

ARLINGTON, VA 22201-2909

EXAMINER

NG, CHRISTINE Y

ART UNIT

PAPER NUMBER

2616

NOTIFICATION DATE

DELIVERY MODE

04/18/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@VERIZON.COM

Office Action Summary	Application No. 09/144,635	Applicant(s) BARTHOLOMEW ET AL.	
	Examiner CHRISTINE NG	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the appeal brief filed on January 17, 2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2616

3. Claims 1-7, 10-13, 15, 17-27, 33-36, 41-48, 54 and 59-61 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6035020 A to Weinstein et al.

Referring to claim 1, Weinstein et al disclose in Figure 1 a method comprising:

Requesting from a customer premises terminal (122) a local link (subscriber line 110) to a line unit (line card 115) and telephone network switch (voice switch 155) in a switched telephone network a communication path to a destination. Refer to Column 4, lines 12-35 and Column 5, lines 36-43.

Detecting, via a monitor (DTMF receiver 123 and prefix recognizer 125), that the requesting step does not seek conversion (in voice-band filter 145) said line unit.

Connecting said terminal through a portion of said line unit around a converter (A/D converter in voice-band filter 145) in said line unit to a wide band data switch (router/data switch 180) connected to a data network (185). DTMF receiver 123 and prefix recognizer 125 control voice/data switch 130 to send voice requests to voice-band filter 145 for transmission through voice-band filter 145 to a telephone system, and to send data requests to concentrator 160 for transmission to data network 185. Refer to Column 4, line 55 to Column 6, line 35.

Referring to claim 2, Weinstein et al disclose in Figure 1 wherein said portion of said line unit comprises a concentrator network (160) of said line unit. Line cards 115 are connected to concentrator 160. Refer to Column 5, line 62 to Column 6, line 10.

Referring to claim 3, Weinstein et al disclose in Figure 1 wherein said converter comprises a CODEC (A/D converter in voice-band filter 145). Refer to Column 5, lines 25-47.

Referring to claim 4, Weinstein et al disclose in Figure 1 wherein said concentrator network includes a switching system (lines 165 and 175). Refer to Column 5, line 62 to Column 6, line 22.

Referring to claim 5, Weinstein et al disclose in Figure 1 wherein said switching system provides hard wired switching (lines 165 and 175). Refer to Column 5, line 62 to Column 6, line 22.

Referring to claim 6, Weinstein et al disclose in Figure 1 wherein the switching in said switching system provides hard wired switching (subscriber lines 110 and lines 165 and 175) between said terminal and said wide band data switch. Refer to Column 4, lines 12-26; and Column 5, line 62 to Column 6, line 22.

Referring to claim 7, Weinstein et al disclose in Figure 1 wherein said switching system is connected to a digital signal processor (DSP) (modems 167). Modems 167 convert between modulated line signals and baseband digital signals. Refer to Column 6, line 48 to Column 7, line 14.

Referring to claim 10, Weinstein et al disclose in Figure 1 wherein said digital signal processor is indirectly associated with said line unit. Modems 167 are connected to line cards 115 through links 175, concentrator 160 and lines 165.

Referring to claim 11, Weinstein et al disclose in Figure 1 wherein said digital signal processor is directly associated with said wide band data switch. Modems 167 are connected to router/data switch 180. Refer to Column 6, line 48 to Column 7, line 14.

Referring to claim 12, Weinstein et al disclose in Figure 1 wherein said digital signal processor is integrated with said line unit. Modems 167 are connected to line cards 115 through links 175, concentrator 160 and lines 165.

Referring to claim 13, Weinstein et al disclose in Figure 1 wherein said requesting step is made by emitting from said terminal a signal of a predetermined characteristic (dialed telephone numbers could be directed to the telephone system or data network 185; numbers to data network 185 are preceded with a prefix) and wherein said detecting is accomplished by a detecting device (DTMF receiver 123 and prefix recognizer 125) associated with said line unit. DTMF receiver 123 and prefix recognizer 125 control voice/data switch 130 to send voice requests to voice-band filter 145 for transmission to a telephone system, and to send data requests to concentrator 160 for transmission to data network 185. Refer to Column 4, line 55 to Column 6, line 35.

Referring to claim 15, Weinstein et al disclose in Figure 1 wherein said connecting step through a portion of said line unit around a converter therein to a wide band switch is a virtual hard wired connection (lines 165 and 175). Refer to Column 5, line 62 to Column 6, line 22.

Referring to claim 17, Weinstein et al disclose in Figure 1 wherein said line unit comprises a line card (line cards 115).

Referring to claim 18, refer to the rejection of claim 1. Furthermore, Weinstein et al disclose that the request seeks bandwidth in excess of that available through said line

unit. Data services require more bandwidth than telephone services. Refer to Column 8, lines 10-28; and Column 9, lines 42-48.

Referring to claim 19, refer to the rejection of claim 2.

Referring to claim 20, refer to the rejection of claim 13.

Referring to claim 21, refer to the rejection of claim 4.

Referring to claim 22, refer to the rejection of claim 5.

Referring to claim 23, refer to the rejection of claim 6.

Referring to claim 24, refer to the rejection of claim 7.

Referring to claim 25, refer to the rejection of claim 10.

Referring to claim 26, refer to the rejection of claim 11.

Referring to claim 27, Weinstein et al disclose in Figure 1 a method comprising:

Receiving a signal via a local link from customer premises (122) in a telecommunications network connected by said local link (subscriber lines 110) to a program controlled switch (voice/data switch 130) in said telecommunications network. Refer to Column 6, line 11 to Column 7, line 4.

Making a determination, via a monitor (DTMF receiver 123 and prefix recognizer 125), regarding a pre-established characteristic of said signal (dialed telephone numbers could be directed to the telephone system or data network 185; numbers to data network 185 are preceded with a prefix; Column 4, line 55 to Column 6, line 10). DTMF receiver 123 and prefix recognizer 125 control voice/data switch 130 to send voice requests to voice-band filter 145 for transmission to a telephone system, and to

send data requests to concentrator 160 for transmission to data network 185. Refer to Column 4, line 55 to Column 6, line 35.

Responsive to said determination (if signal is directed to data network 185), solid state switching said signal to digital signal processing (modems 167) and a wide band network edge device (router/data switch 180). Modems 167 convert between modulated line signals and baseband digital signals, and send the signals to router/data switch 180. Refer to Column 6, line 48 to Column 7, line 14.

Referring to claim 33, Weinstein et al disclose in Figure 1 wherein said digital signal processing is performed in a processor (modem back 170) separate from said wide band edge device. Refer to Column 6, lines 11-13.

Referring to claim 34, Weinstein et al disclose in Figure 1 wherein the processor performing said digital signal processing is associated with a line unit (line cards 115) through a portion of which said signal is conducted. Signals are transmitted from lines cards 115 to modems 167. Refer to Column 5, line 62 to Column 6, line 10.

Referring to claim 35, Weinstein et al disclose in Figure 1 wherein said processor performing said digital signal processing comprises a part of said line unit. Modems 167 are connected to line cards 115 through links 175, concentrator 160 and lines 165.

Referring to claim 36, Weinstein et al disclose in Figure 1 wherein said digital signal processing is performed in an adaptive digital signal processor (modem 167) with a programmed controller providing coding and decoding functions (conversion between modulated line signals and baseband digital signals) adapted to a particular communication service requested by said signal and the physical level of signal protocol

used over said local link from said customer premises. Each customer premises equipment uses different forms of line signals. Refer to Column 6, lines 48-54.

Referring to claim 41, Weinstein et al disclose in Figure 1 a line unit (line card 115) for a switched telecommunications network comprising trunked together program controlled switches (connection between line card 115 and subscriber line 110) connected to subscriber premises (122) by local links (subscriber lines 110) connected to the line unit. Refer to Column 4, lines 12-43. The line unit comprising:

A line concentrator network (set of line cards 115) for connection to a plurality of local links, said concentrator network including switches (voice/data switch 130), and a high bandwidth port (output 140 of voice/data switch 135).

Customer interface hardware (switch 120).

A converter (voice-band filter 145) for converting signals on the plurality of local links to digital signals at a predetermined narrowband bit-rate (300 Hz to 3300 Hz).

A monitor (DTMF receiver 123 and prefix recognizer 125), for detecting a pre-designated signal (dialed telephone numbers could be directed to the telephone system or data network 185; numbers to data network 185 are preceded with a prefix; Column 4, line 55 to Column 6, line 10) on one of the plurality of local links and providing an output signal to said concentrator network to cause said concentrator network to provide a connection to said port for signals on the one link. DTMF receiver 123 and prefix recognizer 125 control voice/data switch 130 to send voice requests to voice-band filter 145 for transmission through output 135 to a telephone system, and to send data

requests to concentrator 160 for transmission through output 140 to data network 185.

Refer to Column 4, line 12 to Column 6, line 35.

Referring to claim 42, Weinstein et al disclose in Figure 1 wherein said concentrator network comprise solid state switches (voice/data switches 135).

Referring to claim 43, Weinstein et al disclose in Figure 1 wherein the concentrator switches create a hard wired connection to said port for the one link. Voice/data switch 135 can connect to output 140 for connection to data network 185. Refer to Column 5, line 62 to Column 6, line 10.

Referring to claim 44, Weinstein et al disclose in Figure 1 wherein said line unit delivers said signals on the one link to said port in unconverted format. Signals sent to output 140 have not been converted into digital signals by modem 167. Refer to Column 5, line 62 to Column 6, line 54.

Referring to claim 45, refer to the rejection of claim 36.

Referring to claim 46, Weinstein et al disclose in Figure 1 a line unit (line card 115) for selective connection of a local link (subscriber line 110) to a digital switch (voice switch 155 and router/data switch 180) of a telephone network and a broadband data network (185). The line unit comprising:

A switch (voice/data switch 130) for connection to the local link, the switch comprising a first port (output 135) for a narrowband communication and a second port (output 140) for connection to the broadband data network.

A monitor means (DTMF receiver 123 and prefix recognizer 125) for detecting a request for a broadband service and in response controlling the switch to connect the

local link to the second port. DTMF receiver 123 and prefix recognizer 125 control voice/data switch 130 to send voice requests to voice-band filter 145 for transmission through output 135 to a telephone system, and to send data requests to concentrator 160 for transmission through output 140 to data network 185. Refer to Column 4, line 55 to Column 6, line 35.

Referring to claim 47, Weinstein et al disclose in Figure 1 that the line unit further comprises a channel circuit (connection of voice/data switch 130 to output 135), coupled to the first port, for channeling signals for communication via the local link and a predetermined digital rate channel (300 Hz to 3300 Hz) corresponding to the narrowband communication. Refer to Column 5, lines 25-34.

Referring to claim 48, refer to the rejection of claims 46 and 47.

Referring to claim 54, refer to the rejection of claim 1. Weinstein et al also disclose in Figure 1 wherein said connecting step through a portion of said line unit around a converter therein to a wide band switch is a virtual hard wired connection (lines 165 and 175). Refer to Column 5, line 62 to Column 6, line 22.

Referring to claim 59, refer to the rejection of claim 27, 33 and 34.

Referring to claim 60, refer to the rejection of claim 35.

Referring to claim 61, refer to the rejection of claim 36.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2616

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 6035020 A to Weinstein et al in view of U.S. Patent No. 5,085,913 to Wong.

Wegleitner et al do not disclose wherein said switching system comprises gated-diode cross point (GDX) switching.

Wong discloses that gated diode cross-point switches are used in high voltage electronic devices that may develop voltages in excess of 600 volts. Refer to Column 2, lines 34-44. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein said switching system comprises gated-diode cross point (GDX) switching. One would have been motivated to do so in order to utilize high voltage switching.

6. Claims 9, 28-30, 37-40 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,480,487 to Weinstein et al in view of U.S. Patent No. 6035020 A to Opalka et al.

Referring to claim 9, Weinstein et al do not disclose wherein said switching system comprises cross point switching.

Opalka et al disclose in Figure 7 that cross point switches have the advantage of a high rate of data transfer from one point to another without the limitation of main memory contention on memory-based switches. Refer to Column 9, lines 7-25.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein said switching system comprises cross point

Art Unit: 2616

switching. One would have been motivated to do so since cross point switches provide for a high rate of data transfer.

Referring to claim 28, Weinstein et al do not disclose wherein said solid state switching comprises cross-point switching. Refer to the rejection of claim 9.

Referring to claim 29, Weinstein et al do not disclose wherein said cross point switching is performed in a line unit in said telecommunications network. Refer to the rejection of claim 9.

Referring to claim 30, Weinstein et al disclose in Figure 1 wherein switching (by voice/data switch 130) directs said signal away from a two-way digital/analog converter (A/D converter in voice-band filter 145) in said line unit having predetermined narrowband digital bit-rate capabilities (300 Hz to 3300 Hz). Refer to Column 5, lines 25-34.

However, Weinstein et al do not disclose cross-point switching. Refer to the rejection of claim 9.

Referring to claim 37, Weinstein et al disclose in Figure 1 a communications network comprising:

A switched telecommunications network comprising trunked together program controlled switches (connection between line cards 115 and subscriber lines 110) connected to subscriber premises (122) by local links (Figure 1, subscriber lines 110).

Line units (line cards 115) connecting said local links to said switches, said line units including switches (voice/data switch 130) and converters (A/D converter in voice-band filter 145) performing digital coding and decoding. Refer to Column 5, lines 25-47.

Said line units having monitors (DTMF receiver 123 and prefix recognizer 125) detecting signals from said customer premises having a pre-established characteristic (dialed telephone numbers could be directed to the telephone system or data network 185; numbers to data network 185 are preceded with a prefix; Column 4, line 55 to Column 6, line 10).

Said line units having ports (outputs 135 and 140) connected to said switches, said ports having connections to a wide band data switch (route/data switch 180) connected to a data network (185), wherein when a monitor in one line unit detects signals from one subscriber premises having said pre-established characteristics, the switches, in the one line unit, switches signals through from the link to the one subscriber premises to one of said ports to said wide band data switch. DTMF receiver 123 and prefix recognizer 125 control voice/data switch 130 to send voice requests to voice-band filter 145 for transmission through output 135 to a telephone system, and to send data requests to concentrator 160 for transmission through output 140 to data network 185. Refer to Column 4, line 55 to Column 6, line 35.

Weinstein et al do not disclose that the switches are cross-point switches. Refer to the rejection of claim 9.

Referring to claim 38, Weinstein et al do disclose in Figure 1 that the communications network further includes digital signal processors (modems 167) for processing the signals switched by said cross-point switches to said data network. Modems 167 convert between modulated line signals and baseband digital signals, and

send the signals to router/data switch 180. Refer to Column 6, line 48 to Column 7, line 14.

Referring to claim 39, Weinstein et al disclose in Figure 1 wherein said digital signal processors are associated with said wide band switch to said data network. Modems 167 are connected to router/data switch 180. Refer to Column 6, line 48 to Column 7, line 14.

Referring to claim 40, Weinstein et al disclose in Figure 1 wherein the signals switched through said cross-point switches to said ports to said wide band data switch are hard-wired connected to said wide band data switch. Voice/data switches 130 are connected to router/data switch 180 through lines 165, concentrator 160 and lines 175.

Referring to claim 56, refer to the rejection of claims 27, 28, 29 and 30.

7. Claims 14 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6035020 A to Weinstein et al in view of U.S. Patent No. 6,083,280 to Eitel.

Referring to claim 14, Weinstein et al do not disclose signaling a CPU controlling said telephone network switch to effect an entry in a journal of said telephone network switch, and using said entry for billing for the communications path set up in response to said requesting step.

Eitel discloses that when a call request is first received by a local telephone switch by the calling party, a billing file is created based upon factors such as the service rate of the calling party, the identity of the called party, time of day, etc. Once the billing file is created, a controller of the local switch can determine how to establish

the connection to the called party. Refer to Column 1, lines 43-60. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include signaling a CPU controlling said telephone network switch to effect an entry in a journal of said telephone network switch, and using said entry for billing for the communications path set up in response to said requesting step. One would be motivated to do so in order to provide a method of billing the customer for a particular communications session.

Referring to claim 53, refer the rejection of claim 1 and claim 14.

8. Claims 16 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6035020 A to Weinstein et al in view of U.S. Patent No. 6,480,487 to Wegleitner et al.

Weinstein et al do not disclose wherein said connection to said wide band network is through an Asynchronous Transfer Mode (ATM) edge device.

Wegleitner et al disclose in Figure 1 a remote terminal that sends signals to either a CO12 for connection to a PSTN network or an ATM switch 24 for connection to a broadband ISP. A connection to a wide band network (broadband ISP) is thus made through an ATM edge device (ATM switch 24). Refer to Column 6, line 39 to Column 7, line 8, line 7; and Column 8, lines 14-37. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein said connection to said wide band network is through an ATM edge device. One would have been motivated to do so since ATM is a packet switching protocol that supports voice, video and data over a single network, and allows high bandwidth utilization.

9. Claims 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6035020 A to Weinstein et al in view of U.S. Patent No. 6,163,599 to McHale.

Weinstein et al disclose in Figure 1 that the monitor (DTMF receiver 123 and prefix recognizer 125) includes a signal processor (to distinguish between voice and data calls) and a controller (to control voice/data switch 130), wherein the controller is located in the line unit. DTMF receiver 123 and prefix recognizer 125 control voice/data switch 130 to send voice requests to voice-band filter 145 for transmission through voice-band filter 145 to a telephone system, and to send data requests to concentrator 160 for transmission to data network 185. Refer to Column 4, line 55 to Column 6, line 35.

However, Weinstein et al do not disclose that the monitor includes a scan point matrix switches.

McHale disclose in Figure 4 a cross-point matrix switch that switches a plurality of input data lines 54/150 to a plurality of output data lines 72/152. Refer to Column 10, line 50 to Column 11, line 3. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the monitor includes a scan point matrix switches. One would be motivated to do so in order to provide the monitor with a means of switching signals from certain input lines to certain output lines.

10. Claims 31, 32, 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6035020 A to Weinstein et al in view of U.S. Patent

Art Unit: 2616

No. 6,259,699 to Opalka et al, and in further view of U.S. Patent No. 6,480,487 to Wegleitner et al.

Referring to claims 31 and 57, refer to the rejection of claims 16 and 55.

Referring to claims 32 and 58, Weinstein et al disclose in Figure 1 wherein said digital signal processing occurs in said edge device. Modems 167 and connected to router/data switch 180. Refer to Column 6, line 48 to Column 7, line 14.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE NG whose telephone number is (571)272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6073. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. Ng
April 4, 2008

/Melvin Marcelo/
Primary Examiner, Art Unit 2616

/Huy D. Vu/
Supervisory Patent Examiner, Art Unit 2616